INDEX TO VOLUME XXI.*

A

Abbe, C., obituary notice of S. P. Langley, 321.
Abbe, E., memorial to, 338.
Abraham, H., Ions, Electrons and Corpuscules, 466.
Academy, National, meeting at Washington, 406.
Agassiz, A., Albatross Expedition to Eastern Pacific, 257.
Alaska, Copper River region, geology, Mendenhall, 82; Mesozoic section in, Stanton and Martin, 181.
Albatross Expedition to the Eastern Pacific, Agassiz, 257.
Allen, E. T., polymorphic forms of calcium metasilicate, 89.
Arizona, Coon Butte, Barringer and Tilghman, 402; copper deposits, Lindgren, 332; stony meteorite, Mallet, 347.
Association, American, meeting at New Orleans, 188.
Auer burner, spectrum of, Rubens, 172.

B

Baker, R. H., solar eclipse of 1907, 245.
Ball, S. H., pre-Cambrian rocks of Georgetown, Col., 371.
Ballore, F. de M. de, les Tremblements de Terre, 331.
Barnes, C., nucleation of the atmosphere, 400.
Bauschinger, Bahnbestimmung, 478.
Berry, E. W., Prorosmarus alleni from Virginia, 444.
Birds, see **ZOOLOGY.**
Boltwood, B. B., radio-activity of salts of radium, 409; radio-activity of thorium minerals and salts, 415.
Bose, J. C., Plant response as a means of investigation, 476.
Boston Society of Natural History, Guide to Invertebrate Collection, Sheldon, 336, 475.

BOTANY.

Desmidiaceæ, British, West, 477.
Fungi, of N. America, Index, Vol. 1, pt. 1, Farlow, 87.
Pflanzenfabel in der Weltliteratur, Wünsche, 477.
Plant response as a means of physiological investigation, Bose, 476.
Plants, manganese as fertilizer, 248.
Rhizopoda, British freshwater, Cash and Hopkinson, 475.

Bradley, W. H., precipitates on asbestos, 453.
British Museum, catalogue of Glossopteris flora, Arber, 474; Madreporian corals, Bernard, 474.
— New Guinea, geological features, Maitland, 404.
Brooklyn Institute, bulletins, 479.
Brooks, W. R., The Oyster, 88.
Brown, J., interaction of hydrochloric acid and potassium permanganate, 41.
Buchanan, J. Y., determination of specific gravity of soluble salts, 25.
Bumstead, H. A., heating effects of Röntgen rays in different metals, 1.

C

California, Miocene foraminifera, Bagg, 253.
Canada, geol. survey, see **GEOLOGICAL SURVEYS.**
Carnegie Institution, publications, 258, 479.
Ceylon minerals, Coomaraswamy, 186.
Chamberlin, T. C., geology, 400.

CHEMICAL WORKS.

Ammonia, liquid, as a solvent, Bronn, 79.
Chemistry, Conversations on, Ostwald, 248.
— Progress for 1904, Annual Report, 80.
Elements and Compounds, Affinities of, Martin, 79.

* This Index contains the general heads, BOTANY, CHEMISTRY (incl. chem. physics), GEOLOGY, MINERALS, OBITUARY, ROCKS, ZOOLOGY, and under each the titles of Articles referring thereto are mentioned.

INDEX TO VOLUME XXI.*

A

Abbe, C., obituary notice of S. P. Langley, 321.
Abbe, E., memorial to, 338.
Abraham, H., Ions, Electrons and Corpuscules, 466.
Academy, National, meeting at Washington, 406.
Agassiz, A., Albatross Expedition to Eastern Pacific, 257.
Alaska, Copper River region, geology, Mendenhall, 82; Mesozoic section in, Stanton and Martin, 181.
Albatross Expedition to the Eastern Pacific, Agassiz, 257.
Allen, E. T., polymorphic forms of calcium metasilicate, 89.
Arizona, Coon Butte, Barringer and Tilghman, 402; copper deposits, Lindgren, 332; stony meteorite, Mallet, 347.
Association, American, meeting at New Orleans, 188.
Auer burner, spectrum of, Rubens, 172.

B

Baker, R. H., solar eclipse of 1907, 245.
Ball, S. H., pre-Cambrian rocks of Georgetown, Col., 371.
Ballore, F. de M. de, les Tremblements de Terre, 331.
Barnes, C., nucleation of the atmosphere, 400.
Bauschinger, Bahnbestimmung, 478.
Berry, E. W., Prorosmarus alleni from Virginia, 444.
Birds, see **ZOOLOGY.**
Boltwood, B. B., radio-activity of salts of radium, 409; radio-activity of thorium minerals and salts, 415.
Bose, J. C., Plant response as a means of investigation, 476.
Boston Society of Natural History, Guide to Invertebrate Collection, Sheldon, 336, 475.

BOTANY.

Desmidiaceæ, British, West, 477.
Fungi, of N. America, Index, Vol. 1, pt. 1, Farlow, 87.
Pflanzenfabel in der Weltliteratur, Wünsche, 477.
Plant response as a means of physiological investigation, Bose, 476.
Plants, manganese as fertilizer, 248.
Rhizopoda, British freshwater, Cash and Hopkinson, 475.

Bradley, W. H., precipitates on asbestos, 453.
British Museum, catalogue of Glossopteris flora, Arber, 474; Madreporian corals, Bernard, 474.
— New Guinea, geological features, Maitland, 404.
Brooklyn Institute, bulletins, 479.
Brooks, W. R., The Oyster, 88.
Brown, J., interaction of hydrochloric acid and potassium permanganate, 41.
Buchanan, J. Y., determination of specific gravity of soluble salts, 25.
Bumstead, H. A., heating effects of Röntgen rays in different metals, 1.

C

California, Miocene foraminifera, Bagg, 253.
Canada, geol. survey, see **GEOLOGICAL SURVEYS.**
Carnegie Institution, publications, 258, 479.
Ceylon minerals, Coomaraswamy, 186.
Chamberlin, T. C., geology, 400.

CHEMICAL WORKS.

Ammonia, liquid, as a solvent, Bronn, 79.
Chemistry, Conversations on, Ostwald, 248.
— Progress for 1904, Annual Report, 80.
Elements and Compounds, Affinities of, Martin, 79.

* This Index contains the general heads, BOTANY, CHEMISTRY (incl. chem. physics), GEOLOGY, MINERALS, OBITUARY, ROCKS, ZOOLOGY, and under each the titles of Articles referring thereto are mentioned.

CHEMISTRY.

Alkaline metals, boiling points of, Ruff and Johannsen, 78; hydrides of, Moissan, 77.
Ammonium sulphate, decomposition, Delépine, 247.
Antimony, modifications, Stock and Siebert, 170.
Asbestos, precipitates on, Penfield and Bradley, 453.
Bismuth, determination, Staehler and Schaffenberg, 171.
Bromine fluoride, Lebeau, 172.
Caesium chromates, Fraprie, 309.
Calcium hydride, gaseous in acetylene, 464; preparation, Jaubert, 464.
— metasilicate, polymorphic forms, Allen and White, 89.
Carbon oxybromide, von Bartel, 463.
suboxide, Diels and Wolf, 396.
Cyanogen, synthesis of, Wallis, 464.
Ferric chloride in the zinc reductor, Randall, 128.
Gold, colorimetric determination, Maxson, 270.
— distillation, Moissan, 171.
Grape sugar, determination, 325.
Halogens in organic compounds, determination, Vaubel and Schauer, 396.
Hydriodic acid, rapid preparation, Bodroux, 326.
Hydrochloric acid and potassium permanganate, interaction, Brown, 41.
Iron group, distillation of metals, Moissan, 397.
— rusting of, 78.
Iron-cyanogen compounds, cause of color, 78.
Manganese as a fertilizer for plants, Bertrand, 248.
Nitrous and nitric acids, determination, Weisenheimer and Heim, 170.
Organic substances, mechanical separation, Bordas and Tourplain, 398.
Platinum group, boiling of metals of, Moissan, 325.
Polonium, radio-activity of, Curie, 326.
Radium, see **Radium.**
Silicon, fluoroform, Ruff and Albert, 247.
Silver, electro chemical equivalent, Van Dijk, 326.
— vapor, molecular weight, Wartenberg, 463.
Sulphur in pyrites, determination, Hintz and Weber, 324.
Tellurous and telluric acids, Berg, 248.
Thorium, see **Thorium.**

Chwolson, O. D., Lehrbuch der Physik, 174.
Cirkel, F., asbestos, 255; mica, 405.
Coast Survey, report, Tittmann, 259.
Coherer, electrolytic, Gundry, 326.
Colorado, Georgetown, pre-Cambrian rocks, Ball, 371.
— red beds of southwestern, Cross and Howe, 328.
Colloidal solutions, electrically prepared, Burton, 399.
Condenser sparks, energy, duration, etc., Heydweiller, 465.
"Container," new form for Museums, Goodale, 451.
Corals, Madreporian in British Museum, Bernard, 474.
— Paleozoic, early stages, Gordon, 109.
Cross, W., red beds of southwestern Colorado, 328.
Crystallography, Groth, 185.
Crystals, drawing of, Penfield, 206.
Cuba, Harvard Botanical Station, 475.

D

Dadourian, H. M., radio-activity of thorium, 427.
DeLury, J. S., cobaltite in northern Ontario, 275.
Doelter, C., Petrogenesis, 472.
Dominica, Avifauna of, A. H. Verrill, 337.
Dresser, J. A., metamorphic rocks of St. Francis Valley, Quebec, 67.
Dynamics of Living Matter, Loeb, 479.

E

Earthquakes, de Ballore, 331.
Eastman, C. R., Dipnoan affinities of Arthrodires, 131.
Electrical conductivity of flames, Wilson and Gold, 399.
— radiation, Paetzold, 250.
— rectifier, Wehnelt, 250.
Electro-Chemistry, Hopkins, 249.
Electrolytic coherer, Gundry, 326.
Electron, constitution of, Kaufmann, 398.
Elektrische Kraftübertragung, Philippi, 81.
Ethnology, Bureau of American, publications, 260.

F

Farlow, W. G., Bibliographical Index of North American Fungi, vol. i, pt. 1, 87.
Field Columbian Museum, 408.
Finland, igneous rocks of, Hackman, 85.
Fisher, O., changes of level in the earth's crust, 216.
Flames, electrical conductivity, Wilson and Gold, 399.
Fliess, W., Pfennig, 407.
Foods, microscopy of vegetable, Winton, 335.
Franklin Bi-Centennary, 406.
Fraprie, F. R., cæsium chromates, 309.

G

Geological Congress, International, meeting at Mexico City, 406.

GEOLOGICAL REPORTS AND SURVEYS—

Canada, publications, 404.
Maryland, vol. v, 1905, 331.
North Carolina, vol. 1, 253.
United States, 26th annual report, 250.
— — Topographic Atlas, 251; folios 81, 251; monographs, 175, 253; professional papers, 81, 83, 84, 251, 332; bulletins, 82, 177, 179, 180, 252, 253; water supply papers, 82, 252.
Virginia, bulletin 1, 255.
Wisconsin, bulletin, No. XIV., Grant, 470.

GEOLOGY—

Arthrodires, Dipnoan affinities, Eastman, 131.
Arthrophycus and Dædalus of burrow origin, Sarle, 330.
Bragdon formation, Hershey, 58.
Bryozoa, Bassler, 469.
Buena Vista, priority in use of name, Prosser, 181.
Ceratops, new name for, Lull, 144.
Champsosaurus Cope, osteology of, Brown, 330.
Coal resources of Wyoming, 473.
Copper deposits of Arizona, Lindgren, 332; of Missouri, Bain and Ulrich, 180.
Copper River region, Alaska, geology, Mendenhall, 82.
Diamond fissures, South Africa, Harger, 471.
Diplodocus Marsh, osteology, Holland, 470.
Earth's crust, changes of level in, Fisher, 216.
Essex Co., Mass., geology, etc., Sears, 255.
Floras, Mesozoic, of the U. S., Ward, 175.
Glaciation of Orford and Sutton Mts., Quebec, Wilson, 196.
Glossopteris flora, British museum, catalogue, Arber, 474.
Höhlenkunde, von Knebel, 473.
Judith River beds, geology, Stanton and Hatcher, 177.
Jurassic formation of Texas, paleontology, Cragin, 179.
— fossils, localities of supposed, Veatch, 457.
Laccoliths of Piatigorsk, V. de Derwies, 184.
Lead and zinc deposits of Virginia, Watson, 255; of Wisconsin, Grant, 470.
— zinc and fluorspar deposits of Kentucky, Ulrich and Tangier Smith, 84.
Mesozoic Floras of U. S., Ward, 175.
— section in Alaska, Stanton and Martin, 181.
Miocene foraminifera of California, Bagg, 253.
Ohio geological formations, nomenclature, Prosser, 181.
Paleozoic corals, early stages, Gordon, 109.
— Insects, revision, Handlirsch, 468.
— Lower, formations in New Mexico, Gordon and Graton, 390.
Petrogenesis, Doelter, 472.
Pleistocene of New Mexico, new ruminant from, Gidley, 470.
Plesiosaurs, North American, Williston, 221.
Pre-Cambrian rocks of Georgetown, Colorado, Ball, 371.
Primates, Wasatch and Wind River, Loomis, 277.
Proceratops, Lull, 144.
Prorosmarus alleni from Virginia Miocene, Berry and Gregory, 444.
Protostega, osteology, Wieland, 469.
Red beds of southwestern Colorado, Cross and Howe, 328.
Rock floor of New York, configuration, Hobbs, 182.
Rock-weathering, peculiarities of, Hilgard, 261.
Tonopah Mining District, Nevada, geology, Spurr, 83.

GEOLOGY—*Continued.*
Triassic cephalopod genera of America, Hyatt and Smith, 253.
Unconformities, significance of certain, Keyes, 296.
Upper Carboniferous genera, Ulrich and Bassler, 469.
Geology, Chamberlin and Salisbury, 400.
— Lapparent, 401.
— American, History of, Merrill, 467.
— Economic, of the United States, Ries, 256.
Geophysical research, Gibbs, 461.
Gibbs, J. W., geophysical research, 461.
Goodale, G. L., new form of "Container" for Museums, 451.
Gordon, C. E., early stages in Paleozoic corals, 109.
Gordon, C. H., lower Paleozoic formations in N. Mexico, 390.
Graton, L. C., lower Paleozoic formations in N. Mexico, 390.
Greenland, rocks of northwest, Belowsky, 184.
Gregory, W. K., Prorosmarus alleni from Virginia, 444.
Groth, P., Crystallography, 185.

H

Handlirsch, A., revision of Paleozoic Insects, 468.
Harvard Botanical Station, Cuba, 475.
Hatcher, J. B., Geology of Judith River beds, 177.
Headden, W. P., phosphorescent calcites, 301.
Heating effects of Röntgen rays in different metals, Bumstead, 1.
Hershey, O. H., Western Klamath stratigraphy, 58.
Hilgard, E. W., peculiarities of rock-weathering, 261.
Hillebrand, W. F., new mercury mineral from Texas, 85.
Hintze, C., Mineralogie, 257.
Hobbs, W. H., configuration of rock floor of New York, 182.
Hofmeister, F., Beiträge zur chemischen Physiologie, 337.
Hopkins, N. M., Electro-Chemistry, 249.
Howard, K. S., new meteorite from Texas, 186.
Howe, E., red beds of southwestern Colorado, 328.
Hunt, W. F., sulphur and celestite in Michigan, 237.

I

Invertebrates, Guide to, Boston Society Natural History, Sheldon, 336, 475.
Ions, Électrons and Corpuscules, Abraham and Langevin, 466.
— in air, recombination of, Bragg and Kleeman, 399.

J

Jones, H. C., Electrical Nature of Matter, 465.

K

Kentucky, lead, zinc and fluorspar deposits, Ulrich and Tangier Smith, 84.
Keyes, C. R., significance of certain unconformities, 296.
Klamath stratigraphy, Hershey, 58.
Knebel, W. von, Höhlenkunde, 473.
Knight, C. W., pseudo-leucite, Yukon T., 286; re-formation of soda-leucite, 294.
Kraus, E. H., sulphur and celestite in Michigan, 237.
Kunz, G. F., production of Precious Stones in 1904, 187.

L

Lampard, H., celestite in Canada, 188.
Langevin, P., Ions, Électrons and Corpuscules, 466.
Langley, Samuel Pierpont, obituary notice, Abbe, 321
Lapparant, A. de, Géologie, 401.
Leidy, Joseph, Memorial, 338.
Life and Matter, Lodge, 338.
Lightning discharges, after glow from, Walter, 173.
Lindgren, W., copper deposits of Arizona, 332.
Lodge, O., Life and Matter, 338.
Loeb, J., Dynamics of Living Matter, 479.
Loomis, F. B., Wasatch and Wind River primates, 277.
Lull, R. S., new name for the genus Ceratops, 144.

M

Magnetic field and coronal streamers, J. Trowbridge, 189.
— relations of powdered iron, Trenkle, 465.
Magnetization by rapidly oscillating currents, Madelung, 80.

Mallet, J. W., meteorite from Coon Butte, Arizona, 347.
Mann, G., Chemistry of the Proteids, 407.
Martin, G., Affinities of Elements and Compounds, 79.
Maryland Geol.-Survey, see **GEOL. REPORTS.**
Matter, Electrical nature of, Jones, 465.
Mawson, D., Geology of the New Hebrides, 403.
Maxson, R. N., colorimetric determination of gold, 270.
Mazama, 260.
McCoy, H. M., radio-activity of thorium compounds, 433.
Mechanics, Merrill, 260.
Mendenhall, W. C., geology of Copper River region, Alaska, 82.
Merrill, G. P., new meteorite, Scott Co., Kansas, 356; History of American Geology, 467.
Meteorite, iron, Rodeo, Mexico, Farrington, 86; new from Texas, Howard, 186.
— **stone**, Coon Butte, Arizona, Mallet, 347; new, Scott Co., Kansas, Merrill, 356; Shelburne, Ontario, Borgström, 86.
Meteorites, Canyon Diablo, Barringer and Tilghman, 402.
Miers, H. A., phenocrysts in igneous rocks, 182.
Miller, W. G., cobalt-nickel arsenides of Temiskaming, 256.
Mineralogie, Hintze, 257.
— von Japan, 405.

MINERALS.

Asbestos, Canada, 255.
Barite, Maryland, 369.
Calcites, phosphorescent, 301. Celestite, Canada, 188; Michigan, 237. Cobaltite, Northern Ontario, 275. Corundum, N. Carolina, 253.
Feldspars, determination of, Wright, 361. Fluorite, 405; in Kentucky, 84.
Mercury mineral, new, Terlingua, Texas, 85. Mica, Canada, 405.
Opal pseudomorphs, New South Wales, 254.
Pseudo-leucite, Yukon T., 286. Pseudo-wollastonite, 89.
Siderite, Maryland, 364. Silver, Canada, 256. Smaltite, Canada, 256. Soda-leucite, re-formation, 294. Sulphur, Michigan, 237.
Thorianite, 187.
Wollastonite, 89.
Missouri, copper deposits, Bain and Ulrich, 160.
— geol. Bureau, publications, 181.

N

National Museum, publications, 260; report June 1904, 479.
Nevada, geology of Tonopah mining district, Spurr, 83.
New Hebrides, Geology, Mawson, 403.
New Mexico, lower Paleozoic formations, Gordon and Graton, 390.
New York, configuration of rock floor of, Hobbs, 182.
— State Museum, bulletins, 87, 181.
Norway, Crustacea, Sars, 337.
Nucleation of the atmosphere, Barus, 400.

OBITUARY.

Beale, L. S., 408.
Curie, P., 408.
Langley, S. P., 321.
Peirce, J. M., 408.
Russell, I. C., 481.
Shaler, N. S., 408, 480.
Observatory, U. S. Naval, 260.
Oceanography of the Pacific, Flint, 333.
Orbits of celestial bodies, determination, Bauschinger, 478.
Osann, A., Chemische Petrographie, 183.
Ostwald, W., Conversations on Chemistry, part ii, 248.
Ostwald's Klassiker der exakten Wissenschaften, 188.
Oyster, Brooks, 88.

P

Pacific, Albatross Expedition to the Eastern, Agassiz, 257.
— oceanography, Flint, 333.
Paléontologie, Annales de, Vol. I, pts. I and II, 330.
Penfield, S. L., drawing of crystals, 206; precipitates on asbestos, 453.
Petrography, see **ROCKS.**
Philippi, W., Elektrische Kraftübertragung, 81.
Philippine Journal of Science, 336, 408.
Physical measurements, Sabine, 467.
— Phenomena, Modern Theory of, Righi, 328.
Physik, Lehrbuch, Chwolson, 174.

Physiologie, Beiträge zur chemischen, Hofmeister, 337.
Polariscope, Rolfe, 174.
Prosser, C. S., use of name Buena Vista for a geol. terrain, 181.
Proteids. chemistry of, Mann, 407.

Q

Quebec, metamorphic rocks of St. Francis Valley, Dresser, 67.
— glaciation of Orford and Sutton Mts., Wilson, 196.

R

Radiation from ordinary materials, Campbell, 249.
Radio-activity of polonium, Curie, 326; of the salts of radium, Boltwood, 409; of thorium, Dadourian, 427; of thorium minerals and salts, Boltwood, 415; retardation of the velocity of α particles in, Rutherford, 399.
Radium, atomic weight of, Jones, 397.
— crystal photography, Walter, 466.
— properties of α-rays, Rutherford, 172.
— radio-activity of the salts of, Boltwood, 409.
Randall, D. L., ferric chloride in the zinc reductor, 128.
Read, T. T., re-formation of soda-leucite, 294.
Relay, telephone, J. Trowbridge, 339; Jensen and Sieveking, 173.
Ries, H., Economic Geology of the United States, 256.
Righi, A., Modern Theory of Physical Phenomena, 328.

ROCKS.
Analyses of igneous rocks, Osann, 183.
Cancrinite-syenite from Kuolajärvi, Sundell, 254.
Igneous rocks, phenocrysts in, Miers, 182; of Finland, and Kola peninsula, Hackman, 85.
Metamorphic rocks of St. Francis Valley, Quebec, Dresser, 67.
Peridotites of N. Carolina, Pratt and Lewis, 253.
Petrography of northwest Greenland, Belowsky, 184.
Rolfe, G. W., Polariscope, 174.
Röntgen and cathode rays, ionization, Herweg, 327.
— rays, heating effects, Bumstead, 1.
Ross, W. H., radio-activity of thorium compounds, 433.
Russia, Piatigorsk, laccoliths of, V. de Derwies, 184.
Rutherford, E., properties of α-rays from radium, 172; retardation of velocity of α particles, 399.

S

Sabine, W. C., Physical Measurements, 467.
Salisbury, R. D., Geology, 400.
Salts, determination of the specific gravity, Buchanan, 25.
Sarle, on Arthrophycus and Dædalus, 380.
Schaller, W. T., siderite and barite from Maryland, 364.
Sears, J. H., geology, etc., of Essex Co., Mass., 255.
Smithsonian Institution, annual report, June 1905, 259.
Soils, formation of, Hilgard, 261.
South Africa, diamond fissures, Harger, 471.
Spark potentials, Toepler, 249.
Specific gravity of soluble salts, determination of, Buchanan, 25.
Spectrum of Auer burner, Rubens, 172.
— of the high tension flaming discharge, Walter, 465.
Spurr, J. E., geology of Tonopah mining district, Nevada, 83.
Stanton, T. W., geology of the Judith River Beds, 177.
Steam, superheated, specific heat, Rubens and Henning, 173.
Stokes, Sir G. G., Mathematical and Physical Papers, 174.
Sun, total eclipse of, 1907, 245.

T

Tassin, W., analysis of meteorite from Kansas, 356.
Telegraphy, wireless, influence of the earth in, Sachs, 80.
Telephone relay, microphone contact for, Jensen and Sieveking, 173; Trowbridge, 339.
Temiskaming, cobalt-nickel arsenides, Miller, 256.
Texas, Jurassic formation, paleontology, Cragin, 179.
— new mercury mineral, Hillebrand, 85.
— new meteorite from, Howard, 186.

Thorium, radio-activity of, Dadourian, 427.
— compounds, radio-activity, McCoy and Ross, 433.
— minerals and salts, radio-activity, Boltwood, 415.
Todd, D., total solar eclipse, Jan., 1907, 245.
Trowbridge, C. C., interlocking of feathers in flight of birds, 145.
Trowbridge, J., magnetic field and coronal streamers, 189; telephone relay, 339.

U

United States, economic geology of, Ries, 256.
— see **Coast Survey, Geol. Reports, National Museum, Observatory.**

V

Veatch, A. C., localities of supposed Jurassic fossils, 457.
Venice, Lagoon of, 407.
Verrill, A. H., new species of Dynastes, Dominica, 317; avifauna of Dominica, 337.
Virginia, lead and zinc deposits, Watson, 255.

W

White, W. P., polymorphic forms of calcium metasilicate, 89.
Williston, S. W., North American Plesiosaurs, 221.
Wilson, A. W. G., glaciation of Orford and Sutton Mts., Quebec, 196.
Winton, A. L., Microscopy of Vegetable Foods, 335.
Wisconsin, lead and zinc deposits, Grant, 470.
Wright, F. E., optical study of wollastonite and pseudo-wollastonite, 103; determination of feldspars, 361.
Wyoming, coal resources, 473.

X

X-ray, new kind, Seitz, 80.
— see **Röntgen rays.**

Z

ZOOLOGY—
Avifauna of Dominica, A. H. Verrill, 337.
Birds, interlocking of feathers in flight, Trowbridge, 145.
— of the Southern Lesser Antilles, Clark, 337.
Corals, Madreporian, in British Museum, 474.
Crustacea of Norway, Sars, 337.
Dynastes, new species from Dominica, Verrill, 317.
Echinoderma, Bather, 330.
Invertebrates of Boston Soc. Nat. History, Sheldon, 336, 475.
Isopods of No. America, Richardson, 337.
Lagenidæ, developmental stages, Cushman, 180.